

EXHIBIT A

NEITHER THESE SECURITIES NOR THE SECURITIES ISSUABLE UPON CONVERSION HEREOF HAVE BEEN REGISTERED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE OR UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"). THE SECURITIES ARE RESTRICTED AND MAY NOT BE OFFERED, RESOLD, PLEDGED OR TRANSFERRED EXCEPT IN ACCORDANCE WITH REGULATIONS UNDER THE ACT, OR AS PERMITTED UNDER THE ACT PURSUANT TO REGISTRATION OR EXEMPTION OR SAFE HARBOR THEREFROM.

No.03-06-_____

US \$350,000

ADVANCED TECHNOLOGY INDUSTRIES, INC.

9% CONVERTIBLE DEBENTURE DUE MARCH 23, 2007

THIS DEBENTURE is one of a duly authorized issue of Debentures of ADVANCED TECHNOLOGY INDUSTRIES, INC., a corporation duly organized and existing under the laws of the State of Delaware (the "Company"), designated as its 9% Convertible Debentures Due March 23, 2007.

FOR VALUE RECEIVED, the Company promises to pay to CHICAGO VENTURE PARTNERS, L.P., the registered holder hereof (the "Holder"), the principal sum of THREE HUNDRED FIFTY THOUSAND DOLLARS (US \$350,000) on March 23, 2007 (the "Maturity Date") and to pay interest, on a simple non-compound basis, on the principal sum outstanding from time to time in arrears upon the earlier of conversion, redemption or the Maturity Date, as provided herein ("Interest Payment Date") at the rate of 9% per annum. Accrual of interest shall commence on the first business day to occur after the date hereof until payment in full of the principal sum has been made or duly provided for. Subject to the provisions of Section 4 below, the principal of, and interest on, this Debenture are payable at the option of the Holder, in shares of Common Stock of the Company, \$.0001 par value ("Common Stock"), or in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts, at the address last appearing on the Debenture Register of the Company as designated in writing by the Holder from time to time.

This Debenture is being issued pursuant to the terms of the Securities Purchase Agreement, dated as of even date (the "Securities Purchase Agreement"), to which the Company and the Holder (or the Holder's predecessor in interest) are parties. Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Securities Purchase Agreement.

This Debenture is subject to the following additional provisions:

1. The Debentures are issuable in denominations of Fifty Thousand Dollars (US\$50,000) and integral multiples thereof. The Debentures are exchangeable for an equal aggregate principal amount of Debentures of different authorized denominations, as requested by the Holders surrendering the same. No service charge will be made for such registration or transfer or exchange.
2. The Company shall be entitled to withhold from all payments of principal of, and interest on, this Debenture any amounts required to be withheld under the applicable provisions of the United States income tax laws or other applicable laws at the time of such payments, and Holder shall execute and deliver all required documentation in connection therewith.
3. This Debenture has been issued subject to investment representations of the original purchaser hereof and may be transferred or exchanged only in compliance with the Securities Act of 1933, as amended (the "Act"), and other applicable state and foreign securities laws and the terms of the Securities Purchase Agreement. In the event of any proposed transfer of this Debenture, the Company may require, prior to issuance of a new Debenture in the name of such other person, that it receive reasonable transfer documentation including opinions that the issuance of the Debenture in such other name does not and will not cause a violation of the Act or any applicable state or foreign securities laws. Prior to due presentment for transfer of this Debenture, the Company

and any agent of the Company may treat the person in whose name this Debenture is duly registered on the Company's Debenture Register as the owner hereof for the purpose of receiving payment as herein provided and for all other purposes, whether or not this Debenture be overdue, and neither the Company nor any such agent shall be affected by notice to the contrary.

4. (a) Subject to Section 4(b), from and after the date hereof, the Holder of this Debenture is entitled, at its option, to convert at any time the principal amount of this Debenture, provided that the principal amount is at least US \$10,000 (unless if at the time of such election to convert the aggregate principal amount of all Debentures registered to the Holder is less than Ten Thousand Dollars (US \$10,000), then the whole amount thereof) and accrued interest, into shares of Common Stock at a conversion price (the "Conversion Price") for each share of Common Stock equal to the lesser of (i) seven cents (\$.07) as such price may be adjusted as provided herein (the "Fixed Conversion Price") or (ii) 75% of the Market Price on the Conversion Date (as defined below), as such price may be adjusted as provided herein (the "Variable Conversion Rate"). For purposes of this Section 4, the Market Price shall be the average of the lowest five (5) days closing bid prices (not necessarily consecutive) of the Common Stock for the thirty (30) Trading Days immediately preceding the Conversion Date, as reported by the Reporting Service, or, in the event the Common Stock is listed on a stock exchange or traded on NASDAQ, the Market Price shall be the closing prices on the exchange on such dates, as reported in the Wall Street Journal.

(b) In the event that the Conversion Price shall be less than \$.07 as such price may be adjusted as provided herein (the "Redemption Trigger"), the Holder may convert the principal amount of this Debenture only if the Holder emails a notice to the Company, ATT: amk@ltdnetwork.com, advising the Company of its intention to convert all or a specified amount of the principal amount of this Debenture ("Stated Amount") within the fourteen (14) day period (the "Redemption Period") after delivery of such notice ("Notice Date"); provided that the Holder shall not be entitled to submit a Notice of Conversion (as defined below) until after the Reply Date (as defined below). Not later than the end of the next business day following the Notice Date (the "Reply Date"), the Company shall notify the Holder by email ([]) whether it elects to redeem the Stated Amount in cash in lieu of permitting the Holder to so convert ("Reply Notice"). In the event the Company does not timely deliver a Reply Notice, or delivers a Reply Notice but elects not to redeem the Stated Amount, it shall not be permitted to redeem the Stated Amount during the Redemption Period. In the event the Company elects to redeem the Stated Amount, then thereafter with respect to each Notice of Conversion delivered during the Redemption Period, the Company shall pay an amount in immediately available funds (each a "Redemption Amount") equal to (a) 150% of principal amount of this Debenture that is subject to conversion in such applicable Notice of Conversion, plus (b) accrued and unpaid interest with respect to such principal amount up to the Redemption Date, and shall be paid to the Holder by the close of the third (3rd) business day following the date on which the Holder faxes or otherwise delivers such Notice of Conversion to the Company (any such date of redemption, the "Redemption Date") in accordance with Section 5; provided that the aggregate of all such principal amounts under all such Notices of Conversion delivered during the Redemption Period shall not exceed the Stated Amount. In the event the payment of the Redemption Amount is not timely made on the Redemption Date, any right of redemption contained in this Section 4(b) shall thereafter permanently terminate with respect to this Debenture, and the Company shall, with respect to any conversions submitted during the Redemption Period, cause to be issued to the Holder 105% of the number of shares of Common Stock otherwise required to be delivered to the Holder in accordance with Section 4(a) with respect to conversions of the lesser of (x) the Stated Amount and (y) the principal amount of this Debenture requested to be converted as set forth in any Notices of Conversion. If the Holder does not deliver a Notice of Conversion during the Redemption Period it must comply with the provisions of this Section 4(b) with respect to any intended conversions following the Redemption Period. Nothing contained in this Section 4(b) shall be deemed to obligate the Holder to submit a Notice of Conversion during the Redemption Period. Furthermore, the Holder may elect to forgo the redemption right set forth herein, and submit a Notice of Conversion with a Conversion Price above the Redemption Trigger.

(c) Conversion shall be effectuated by faxing a Notice of Conversion to the Company as provided in this Section 4(c). The Notice of Conversion shall be executed by the Holder of this Debenture and shall evidence such Holder's intention to convert this Debenture or a specified portion hereof in the form annexed hereto as Exhibit A. The number of shares of Common Stock to be issued in payment of any interest shall be determined by dividing the dollar amount of the interest to be so paid by the Conversion Price on the relevant Interest Payment Date. No fractional shares of Common Stock or scrip representing fractions of shares will be issued on conversion, but the number of shares issuable shall be rounded to the nearest whole share. The date on which notice of

conversion is given (the "Conversion Date") shall be deemed to be the date on which the Holder faxes or otherwise delivers the conversion notice ("Notice of Conversion") to the Company so that it is received by the Company on such specified date, provided that, if such conversion would convert the entire remaining principal of this Debenture, the Holder shall deliver to the Company the original Debentures being converted no later than five (5) business days thereafter. Facsimile delivery of the Notice of Conversion shall be accepted by the Company at facsimile number 212-532-2904; Attn: Allan Klepfisz. Certificates representing Common Stock upon conversion ("Conversion Certificates") will be delivered to the Holder at the address specified in the Notice of Conversion (which may be the Holder's address for notices as contemplated by the Securities Purchase Agreement or a different address), via express courier, by electronic transfer or otherwise, within three (3) business days (such third business day, the "Delivery Date") after the Conversion Date. The Holder shall be deemed to be the holder of the shares issuable to it in accordance with the provisions of this Section 4(c) on the Conversion Date.

5. The principal of and interest on this Debenture shall be due and payable on the Maturity Date, at the option of the Holder, in cash or in Common Stock. If principal and interest is to be paid in Common Stock as contemplated hereby, the number of shares of Common Stock to be issued in payment of such principal and interest shall be determined by dividing the dollar amount of the principal and interest to be so paid by the Conversion Price on the Maturity Date. All payments contemplated hereby to be made "in cash" shall be made in immediately available good funds of United States of America within three (3) business days of the Interest Payment Date by wire transfer to an account designated in writing by the Holder to the Company (which account may be changed by notice similarly given). All payments of cash and each delivery of shares of Common Stock issuable to the Holder as contemplated hereby shall be made to the Holder at the address last appearing on the Debenture Register of the Company as designated in writing by the Holder from time to time; except that the Holder can designate, by notice to the Company, a different delivery address for any one or more specific payments or deliveries.

6. If, for as long as this Debenture remains outstanding, the Company enters into a merger (other than where the Company is the surviving entity) or consolidation with another corporation or other entity or a sale or transfer of all or substantially all of the assets of the Company to another person (collectively, a "Sale"), the Company will require, in the agreements reflecting such transaction, that the surviving entity expressly assume the obligations of the Company hereunder. Notwithstanding the foregoing, if the Company enters into a Sale and the holders of the Common Stock are entitled to receive stock, securities or property in respect of or in exchange for Common Stock, then as a condition of such Sale, the Company and any such successor, purchaser or transferee will agree that the Debenture may thereafter be converted on the terms and subject to the conditions set forth above into the kind and amount of stock, securities or property receivable upon such merger, consolidation, sale or transfer by a holder of the number of shares of Common Stock into which this Debenture might have been converted immediately before such merger, consolidation, sale or transfer, subject to adjustments which shall be as nearly equivalent as may be practicable. In the event of any such proposed Sale, the Holder hereof shall have the right to convert by delivering a Notice of Conversion to the Company within fifteen (15) days of receipt of notice of such Sale from the Company, and Section 4(b) shall not apply to such conversion.

7. If, at any time while any portion of this Debenture remains outstanding, the Company spins off or otherwise divests itself of a part of its business or operations or disposes of all or of a part of its assets in a transaction (the "Spin Off") in which the Company, in addition to or in lieu of any other compensation received and retained by the Company for such business, operations or assets, causes securities of another entity (the "Spin Off Securities") to be issued to security holders of the Company, the Company shall cause (i) to be reserved Spin Off Securities equal to the number thereof which would have been issued to the Holder had all of the Holder's Debentures outstanding on the record date (the "Record Date") for determining the amount and number of Spin Off Securities to be issued to security holders of the Company (the "Outstanding Debentures") been converted as of the close of business on the trading day immediately before the Record Date (the "Reserved Spin Off Shares"), and (ii) to be issued to the Holder on the conversion of all or any of the Outstanding Debentures, such amount of the Reserved Spin Off Shares equal to (x) the Reserved Spin Off Shares multiplied by (y) a fraction, of which (i) the numerator is the principal amount of the Outstanding Debentures then being converted, and (ii) the denominator is the principal amount of the Outstanding Debentures.

8. If, at any time while any portion of this Debenture remains outstanding, the Company effectuates a stock split or reverse stock split of the Common Stock or issues a dividend on the Common Stock consisting of

shares of Common Stock, the Fixed Conversion Price, the Redemption Trigger and any other amounts calculated as contemplated hereby or by any of the other Transaction Agreements shall be equitably adjusted to reflect such action. By way of illustration, and not in limitation, of the foregoing, (i) if the Company effectuates a 2:1 split of the Common Stock, thereafter, with respect to any conversion for which the Company issues shares after the record date of such split, the Fixed Conversion Price, the Redemption Trigger and any market price from a date prior to such split which was used in the calculation of the Conversion Price shall be deemed to be one-half of what it had been immediately prior to such split; (ii) if the Company effectuates a 1:10 reverse split of the Common Stock, thereafter, with respect to any conversion for which the Company issues shares after the record date of such reverse split, the Fixed Conversion Price, the Redemption Trigger and any market price from a date prior to such split which was used in the calculation of the Conversion Price shall be deemed to be ten times what it had been calculated to be immediately prior to such split; and (iii) if the Company declares a stock dividend of one share of Common Stock for every 10 shares outstanding, thereafter, with respect to any conversion for which the Company issues shares after the record date of such dividend, the Fixed Conversion Price, the Redemption Trigger and any market price from a date prior to such split which was used in the calculation of the Conversion Price shall be deemed to be such amount multiplied by a fraction, of which the numerator is the number of shares (10 in the example) for which a dividend share will be issued and the denominator is such number of shares plus the dividend share(s) issuable or issued thereon (11 in the example).

9. The Holder of the Debenture, by acceptance hereof, agrees that this Debenture is being acquired for investment and that such Holder will not offer, sell or otherwise dispose of this Debenture or the shares of Common Stock issuable upon conversion thereof except under circumstances which will not result in a violation of the Act or any applicable state Blue Sky or foreign laws or similar laws relating to the sale of securities.

10. This Debenture shall be governed by and construed in accordance with the laws of the State of New York. The Company and, by acceptance of this Debenture, the Holder consents to the exclusive jurisdiction of the federal courts whose districts encompass any part of the City of New York or the state courts of the State of New York sitting in the City of New York in connection with any dispute arising under this Debenture and hereby waives, to the maximum extent permitted by law, any objection, including any objection based on *forum non conveniens*, to the bringing of any such proceeding in such jurisdictions. To the extent determined by such court, the Company shall reimburse the Holder for any reasonable legal fees and disbursements incurred by the Holder in enforcement of or protection of any of its rights under any of this Debenture.

11. The Company and, by acceptance of this Debenture, the Holder hereby waive a trial by jury in any action, proceeding or counterclaim brought by either of the Parties hereto against the other in respect of any matter arising out of or in connection with this Debenture.

12. The following shall constitute an "Event of Default":

- a. The Company shall default in the payment of principal or interest on this Debenture or any Redemption Amount due hereunder or any other amount due under a Transaction Agreement and, in any such instance, the same shall continue for a period of five (5) business days; or
- b. Any of the representations or warranties made by the Company herein, in the Securities Purchase Agreement or any of the other Transaction Agreements shall be false or misleading in any material respect at the time made; or
- c. In addition to the terms of the Securities Purchase Agreement, the Company fails to authorize or to cause its Transfer Agent to issue shares of Common Stock upon exercise by the Holder of the conversion rights of the Holder in accordance with the terms of this Debenture, fails to transfer or to cause its Transfer Agent to transfer any certificate for shares of Common Stock issued to the Holder upon conversion of this Debenture and when required by this Debenture or the Registration Rights Agreement, and such transfer is otherwise lawful, or fails to remove any restrictive legend on any certificate or fails to cause its Transfer Agent to remove such restricted legend, in each case where such removal is lawful, as and when required by this Debenture, the Securities Purchase

Agreement or the Registration Rights Agreement, and any such failure shall continue uncured for thirty (30) days; or

- d. The Company shall fail to perform or observe, in any material respect, any other covenant, term, provision, condition, agreement or obligation of any Debenture in this series and such failure shall continue uncured for a period of thirty (30) days after written notice from the Holder of such failure; or
- e. The Company shall fail to perform or observe, in any material respect, any covenant, term, provision, condition, agreement or obligation of the Company under the Securities Purchase Agreement (other than Section 5 thereof) and such failure shall continue uncured for a period of thirty (30) days after written notice from the Holder of such failure; or
- f. The Company shall (1) admit in writing its inability to pay its debts generally as they mature; (2) make an assignment for the benefit of creditors or commence proceedings for its dissolution; or (3) apply for or consent to the appointment of a trustee, liquidator or receiver for its or for a substantial part of its property or business; or
- g. A trustee, liquidator or receiver shall be appointed for the Company or for a substantial part of its property or business without its consent and shall not be discharged within sixty (60) days after such appointment; or
- h. Any governmental agency or any court of competent jurisdiction at the instance of any governmental agency shall assume custody or control of the whole or any substantial portion of the properties or assets of the Company and shall not be dismissed within sixty (60) days thereafter; or
- h. Any money judgment, writ or warrant of attachment, or similar process in excess of Five Hundred Thousand (\$500,000) Dollars in the aggregate shall be entered or filed against the Company or any of its properties or other assets and shall remain unpaid, unvacated, unbonded or unstayed for a period of sixty (60) days or in any event later than five (5) days prior to the date of any proposed sale thereunder; or
- i. Bankruptcy, reorganization, insolvency or liquidation proceedings or other proceedings for relief under any bankruptcy law or any law for the relief of debtors shall be instituted by or against the Company and, if instituted against the Company, shall not be dismissed within sixty (60) days after such institution or the Company shall by any action or answer approve of, consent to, or acquiesce in any such proceedings or admit the material allegations of, or default in answering a petition filed in any such proceeding; or
- j. The Company shall have the Common Stock suspended from trading on, or delisted from, the Principal Trading Market for in excess of ten (10) Trading Days; or
- k. Failure by the Company to pay when due any principal of or interest on any other amount payable in respect of one or more items of indebtedness for borrowed money in an aggregate principal amount of \$200,000, in each case beyond the grace period, if any, provided therefore (other than any such default in existence prior to the date hereof that has been disclosed to the initial Holder of this Debenture).

If an Event of Default shall have occurred, then, or at any time thereafter, and in each and every such case, unless such Event of Default shall have been cured or waived in writing by the Holder (which waiver shall not be deemed to be a waiver of any subsequent default) at the option of the Holder and in the Holder's sole discretion, the Holder may consider this Debenture immediately due and payable (and the Maturity Date shall be accelerated accordingly), without presentment, demand, protest or notice of any kinds, all of which are hereby expressly waived, anything herein or in any note or other instruments contained to the contrary notwithstanding, and the Holder may

immediately enforce any and all of the Holder's rights and remedies provided herein or any other rights or remedies afforded by law.

13. Nothing contained in this Debenture shall be construed as conferring upon the Holder the right to vote or to receive dividends or to consent or receive notice as a shareholder in respect of any meeting of shareholders or any rights whatsoever as a shareholder of the Company, unless and to the extent converted in accordance with the terms hereof.

14. Notwithstanding any other provision hereof or of any of the other Transaction Agreements, in no event (except (i) as specifically provided herein as an exception to this provision, or (ii) while there is outstanding a tender offer for any or all of the shares of the Common Stock) shall the Holder be entitled to convert any portion of this Debenture, or shall the Company have the obligation to convert such Debenture (and the Company shall not have the right to pay interest hereon in shares of Common Stock) to the extent that, after such conversion or issuance of stock in payment of interest, the sum of (1) the number of shares of Common Stock beneficially owned by the Holder and its Affiliates (other than shares of Common Stock which may be deemed beneficially owned through the ownership of the unconverted portion of the Debentures or other convertible securities or of the unexercised portion of warrants or other rights to purchase Common Stock), and (2) the number of shares of Common Stock issuable upon the conversion of the Debentures with respect to which the determination of this proviso is being made, would result in beneficial ownership by the Holder and its Affiliates of more than 4.99% of the outstanding shares of Common Stock (after taking into account the shares to be issued to the Holder upon such conversion). For purposes of the immediately preceding sentence, beneficial ownership shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, except as otherwise provided in clause (1) of such sentence.. The Holder, by its acceptance of this Debenture, further agrees that if the Holder transfers or assigns any of the Debentures to a party who or which would not be considered such an Affiliate, such assignment shall be made subject to the transferee's or assignee's specific agreement to be bound by the provisions of this Section 14 as if such transferee or assignee were the original Holder hereof. Nothing herein shall preclude the Holder from disposing of a sufficient number of other shares of Common Stock beneficially owned by the Holder so as to thereafter permit the continued conversion of this Debenture.

15. Payment of this Debenture is secured pursuant to the terms of the Security Agreement, dated July 19, 2005 (the "Security Agreement"), executed by the Company, as debtor, in favor of the Collateral Agent therein, for the benefit of the lenders thereto (including the Holder pursuant to a joinder thereto). The terms of the Security Agreement are incorporated herein by reference.

16. In the event for any reason, any payment by or act of the Company or the Holder shall result in payment of interest which would exceed the limit authorized by or be in violation of the law of the jurisdiction applicable to this Debenture, then *ipso facto* the obligation of the Company to pay interest or perform such act or requirement shall be reduced to the limit authorized under such law, so that in no event shall the Company be obligated to pay any such interest, perform any such act or be bound by any requirement which would result in the payment of interest in excess of the limit so authorized. In the event any payment by or act of the Company shall result in the extraction of a rate of interest in excess of a sum which is lawfully collectible as interest, then such amount (to the extent of such excess not returned to the Company) shall, without further agreement or notice between or by the Company or the Holder, be deemed applied to the payment of principal, if any, hereunder immediately upon receipt of such excess funds by the Holder, with the same force and effect as though the Company had specifically designated such sums to be so applied to principal and the Holder had agreed to accept such sums as an interest-free prepayment of this Debenture. If any part of such excess remains after the principal has been paid in full, whether by the provisions of the preceding sentences of this Section or otherwise, such excess shall be deemed to be an interest-free loan from the Company to the Holder, which loan shall be payable immediately upon demand by the Company. The provisions of this Section shall control every other provision of this Debenture.

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IN WITNESS WHEREOF, the Company has caused this instrument to be duly executed by an officer thereunto duly authorized.

Dated: March 24, 2006

ADVANCED TECHNOLOGY INDUSTRIES, INC.

By: _____

Allan Klepfisz
(Print Name)

EXHIBIT A

NOTICE OF CONVERSION

(To be Executed by the Registered Holder in order to Convert the Debenture)

The undersigned hereby irrevocably elects to convert \$ _____ of the principal amount of the above Debenture No. ____ into shares of Common Stock of ADVANCED TECHNOLOGY INDUSTRIES, INC. (the "Company") according to the conditions hereof, as of the date written below.

Date of Conversion* _____

Accrued Interest \$ _____

Applicable Conversion Price _____

Signature _____
[Name]

Address: _____
